NOAA
S 222

GENERAL NOTES

1. SEE REF 1 FOR STRUCTURAL DETAILS AND ADDITIONAL NOTES.
2. NAVIGATION LIGHT SHIELDS ARE TO BE PAINTED FLAT BLACK.
3. ALL SNIPES TO BE 1" X 45° UNLESS NOTED OTHERWISE.
4. THIS PLAN MUST BE READ CONCURRENTLY WITH REFERENCE 1.
5. ALL WELDING TO BE CONTINUOUS.
6. ALL PIPES TO BE CAPPED AND SEAL WELDED.

PARTS LIST CONTINUE

ITEM NO	QTY	SIZE	DESCRIPTION	MATERIAL	SPEC NO.	PART NO.	REMARKS	UNIT WT LBS
52	25	LF	PIPE, 3" SCH 80	STL	A-500		VSAT FDN	–
53	32	LF	PIPE, 8" SCH 80	STL	A-500		VSAT FDN	–
54	1	EA	LADDER, 11 RUNG, 12" WIDTH	ALUM			VSAT FDN (MODIFIED)	–

REVISIONS CONTINUE

REV	SHT	ZONE	ITEM	DESCRIPTION	DATE	APPD
B	6	47-D	10	ADDED TO SHOW GUSSET AND EXST FDN	4-30-10	NAG
B	7	50-A	11	ADDED TO SHOW FWD ARRANGEMENT LKD FWD & FDN DETAIL		
B	7	51-A	12	ADDED TO SHOW SIDE ARRANGEMENT & FDN DETAIL		
B	8	57-A	13	ADDED SH 8 TO SHOW FLEET 77 & VSAT FDN DETAILS		
B	9	65-A	14	ADDED SH 9 TO SHOW FLEET 77 FDN DETAILS		
B	10	65-A	15	ADDED SH 10 TO SHOW VSAT FDN DETAILS		
B	11	65-A	16	ADDED SH 11 TO SHOW VSAT FDN DETAILS		
B	12	65-A	17	ADDED SH 12 TO SHOW VSAT FDN DETAILS		

INDEX

6	–
5	–
4	–
3	–
2	–
1	TITLE SHEET

CONTRACT NO. EA133M10CN0028
NAG MARINE, LLC
2511 VALMER AVE SUITE B
NORFOLK, VA 23513-2604

PREPARED	GMQ	5/1/10
CHECKED	DSP	5/1/10
ENGINEER	GMQ	5/1/10
APPROVED	JAV	5/1/10
AUTHORITY:		

PARTS LIST

ITEM NO	QTY	SIZE	DESCRIPTION	MATERIAL	SPEC NO.	PART NO.	REMARKS	UNIT WT LBS
1	–	–	35 FT WHIP (GLASSMASTER)	–	–	–	–	–
2	–	–	SHIP'S SECONDARY GPS 492X (NORTHSTAR)	–	–	–	–	–
3	–	–	PRIMARY CELL PHONE, ANALOG 800 MHZ (SHAKESPEARE 5410-XT)	–	–	–	–	–
4	–	–	NX500 NAVTEX ANTENNA (FURUNO)	–	–	–	–	–
5	–	–	SATELLITE PHONE (IRIDIUM)	–	–	–	–	–
6	–	–	AIS, GSC-001 GPS (FURUNO)	–	–	–	–	–
7	–	–	TRUE TIME RECEIVE ANTENNA	–	–	–	–	–
8	–	–	8 FT VHF WHIP AIS (SHAKESPEARE 5225 XT)	–	–	–	–	–
9	–	–	CELL PHONE, DIGITAL, VERIZON, 800 MHZ (SHAKESPEARE)	–	–	–	–	–
10	–	–	DUAL BAND CELLULAR (INTERNET ONLY), GALAXY 5318 (SHAKESPEARE)	–	–	–	–	–
11	1	EA	VSAT ANTENNA	–	–	WAVECALL 6006	SEATEL, REF. 11	–
12	–	–	INMART SAT C TRIMBLE (GALAXY)	–	–	–	–	–
13	–	–	35 FT WHIP (SHAKESPEARE STYLE 222)	–	–	–	–	–
14	–	–	PRIMARY SHIP GPS GP90 (FURUNO)	–	–	–	–	–
15	–	–	TUNER (GMOSS)	–	–	–	–	–
16	1	EA	S-BAND 30KW ARPA RADAR W/ TURNING UNIT ASSY	–	–	65612A-14 65830MER-S	SPERRY MARINE, REF. 4	320
17	–	–	TUNER (HARRIS)	–	–	–	–	–
18	–	–	SHAKESPEARE 5225 XT (VHF SURVEY RX)	–	–	–	–	–
19	1	EA	X-BAND 25KW ARPA RADAR W/ TURNING UNIT ASSY	–	–	65606/A-7 65825WAR-6	SPERRY MARINE, REF. 4	130
16-P	6	SQ FT	PLATE, 1"	STEEL	DH-36			40.8#
8-P	4	SQ FT	PLATE, 1/2"	STEEL	A-36			20.4#
6-P	5	SQ FT	PLATE, 3/8"	STEEL	A-36			15.3#
5-P	0.5	SQ FT	PLATE, 5/16"	STEEL	A-36			12.75#
20	1	LIN FT	FLAT BAR, 2" x 1/4"	STEEL	A-36			1.70#
21	45	LIN FT	SQUARE BAR 3/4"	STEEL	A-36			1.91#
22	21	LIN FT	PIPE, 4" SCH 40	STEEL	A 53 GR'B'			10.79#
23	16	LIN FT	PIPE, 8" SCH 40	STEEL	A 53 GR'B'			28.55#
8-F	6	SQ FT	FLG PL 9" x 3" x 5/16"	STEEL	A-36			12.75#
24	2	SQ FT	GASKET 1/8" THICK	NEOPRENE	COML			
25	4	EA	CAP SCR, HEX HD,	CRES	ASTM-A276-316		1/2-13 UNC-2A, 1 3/4" LONG	0.13#
26	4	EA	NUT, SLFLKG, 1/2-13 UNC-2B	CRES	ASTM-A276-316			0.04#
27	4	EA	WASHER, FLAT	CRES	ASTM-A276-316		FOR ITEM NO. 25	0.01#
28	4	EA	CAP SCREW HEX HD, 3/4"	CRES	ASTM-A276-316		13 UNC – 2A, 1 3/4" LONG	
29	4	EA	NUT, SELF LOCKING, 3/4"	CRES	ASTM-A276-316		13 UNC – 2B	
30	4	EA	WASHER, FLAT 3/4"	CRES	ASTM-A276-316			
4-CP	4	SF	PLATE, CHECKERD 1/4"	STL	A-36			10.2
31	2	–	POS/MV	STL			GFE	10.2
32	2	–	GPS RECEIVE ANTENNA (SURVEY)	STL			GFE	10.2
33	1	–	SATELLITE TV RECEIVE	STL			GFE	10.2
34	1	–	VHF BUSINESS BAND ANTENNA	STL			GFE	10.2
35	2	–	MARINE VHF TRANSCEIVE	STL			GFE	10.2
36	2	–	CHANNEL 70 MARINE VHF RX	STL			GFE	10.2
37	1	–	VHF/UHF/FM TV ANTENNA	STL			GFE	10.2
38	1	SF	PLATE, 1"	STL	A-36		FLEET FDN	10.2
39	12	SF	PLATE, 1/2"	STL	A-36		FLEET AND VSAT FDN	40.8
40	3	LF	PIPE, 4" SCH 80	STL	A-500		FLEET FDN	20.4
41	5	LF	PIPE, 6" SCH 80	STL	A-500		FLEET FDN	–
42	84	SF	GRATING, 1" THK	FIBERGLASS			FLEET AND VSAT FDN	–
43	35	LF	ANGLE, 1 1/2"	STL			FLEET AND VSAT FDN	–
44	107	LF	PIPE, 1 1/4" DIA	STL			FLEET AND VSAT ANTENNA	–
45	48	LF	PIPE, 1" DIA	STL			FLEET AND VSAT FDN	–
46	8	SF	PLATE, 3/8"	STL	A-36		FLEET AND VSAT FDN	15.3
47	48	SF	PLATE, 1/4"	STL	A-36		FLEET AND VSAT FDN	10.2
48	6	LF	ANGLE, 4" x 3", 1/4" THK	STL			FLEET AND VSAT FDN	–
49	48	LF	I BEAM, W6 x 12	STL			FLEET & VSAT FDN	–
50	4	LF	CHAIN, 5/16" THK	CRES			FLEET AND VSAT FDN	–
51	1	EA	LADDER, 4 RUNG, 12" WIDTH	ALUM			FLEET FDN	–

REVISIONS

REV	SHT	ZONE	ITEM	DESCRIPTION	DATE	APPD
–	ALL	ALL	–	STARTING FROM REFS 1 & 10, ADDED DETAILS FOR NEW ANTENNA FOUNDATIONS TO SUIT NEW ANTENNA ARRANGEMENT.	12-1-04	WRP
A	1	4-F	1	CHANGED MATERIAL LIST TO REFLECT MIDIFICATIONS ACCOMPLISHED UNDER ITEMS 301 AND 302 OF NOAA SPECIFICATIONS EA133M-08-CN-0044	5-1-08	RWF
	2	10-C 12-C 15-E	2	REVISED BODY OF DRAWING TO SHOW INSTALLATION OF X-BAND RADAR AND S-BAND RADAR FOR ITEM 301		
	5	35-E 38-D				
	6	43-D				
	7	53-A 55-A				
	2	10-B 12-B	3	REVISED BODY OF DWG TO SHOW INSTALLATION OF VSAT ANTENNA FOR ITEM 302 AND RELOCATION OF SHIP'S WHISTLE.		
	5	33-D 37-C				
	6	42-A 42-D				
	1	1-C	4	CHANGED REFERENCE 4 DWG NO AND ADDED REFERENCE 11.		
B	1	7-A	1	ADDED CONTRACTORS TITLE BLOCK	4-30-10	NAG
	1	2-A	2	ADDED REF 12		
	1	6-A	3	ADDED ITEM NO 38 THRU 51 ON PARTS LIST		
	1	8-D	4	ADDED PARTS LIST CONTINUATION FOR ITEMS ADDED ITEMS NO 51 THRU 54		
	5	33-D	5	REMOVED VSAT RADOME ANTENNA IN SECTION VIEW		
	5	37-D	6	REMOVED VSAT RADOME ANTENNA IN PLAN VIEW		
	6	42-A	7	REVISED TO SHOW FLEET 77 FDN DETAIL		
	6	44-B	8	REVISED TO SHOW NEW GUSSETS FOR FLEET FDN		
	6	42-D	9	REVISED TO SHOW NEW MOUNTING PLATE		

REVISION TO CONT ON ZONE 8-C

REFERENCES

NO	TITLE	DRAWING NO
1	MAIN MAST ARRANGEMENT & DETAILS	TJ-171-002
2	ENTERTAINMENT SYS DIAG	434-6634709
3	RADIO COMMUNICATION ELEM WRG DIAG	441-6634710
4	RADAR SYS ELEM WRG DIAG	TJ-451-010
5	ELECTRONIC NAV SYS ELEM WRG DIAG	423-6634720
6	STRUCTURAL MOD ASSY NO 16	101-6634875
7	WINDSPEED DIR SYS ELEM WRG DIAG	494-6634693
8	STRL STDS	101-6634906
9	PAINT SCHEDULE	613-6634619
10	ANTENNA ARRANGEMENT (OBSOLETE)	405-6634712
11	VSAT ELEM WRG DIAG	TJ-441-003
12	01 DECK EXT STRUCTURE & GRATING REPLACEMENT	TJ-152-002B
13		

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE & AVIATION OPERATIONS

Seaworthy Systems, Inc.
P.O. BOX 965
ESSEX, CT 06426
TEL: (860) 767-9061

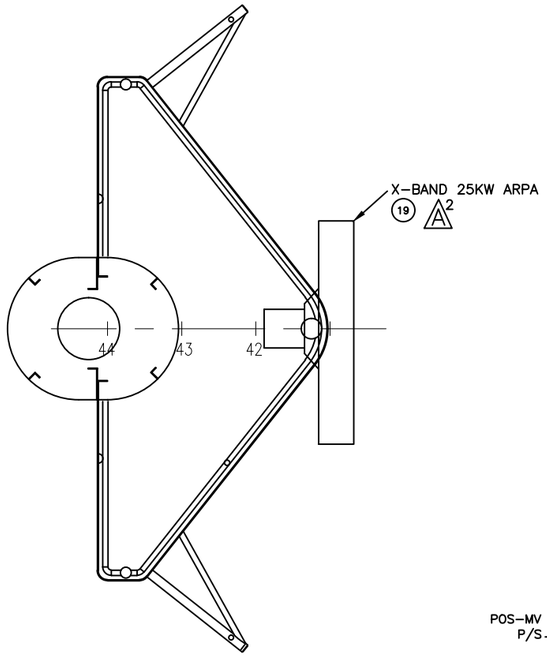
CONTRACT #
50ABNA000032
TAR-SSI-047(04)

DSGN	WRP	12-1-04
DWN	LAG	12-1-04
CHK	JAH	12-3-04
CHK	–	-/-/--
–	NOAA APPROVAL	

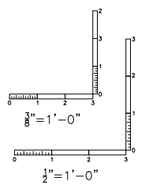
NOAA SHIP THOMAS JEFFERSON

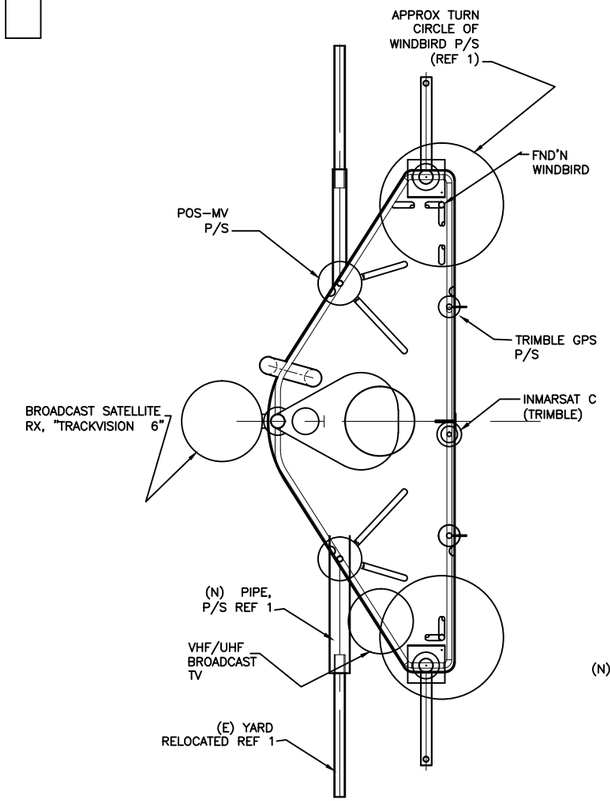
ANTENNA ARRANGMENT

SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN		CAD FILENAME TJ171003.dwg SHT 1 OF 12	

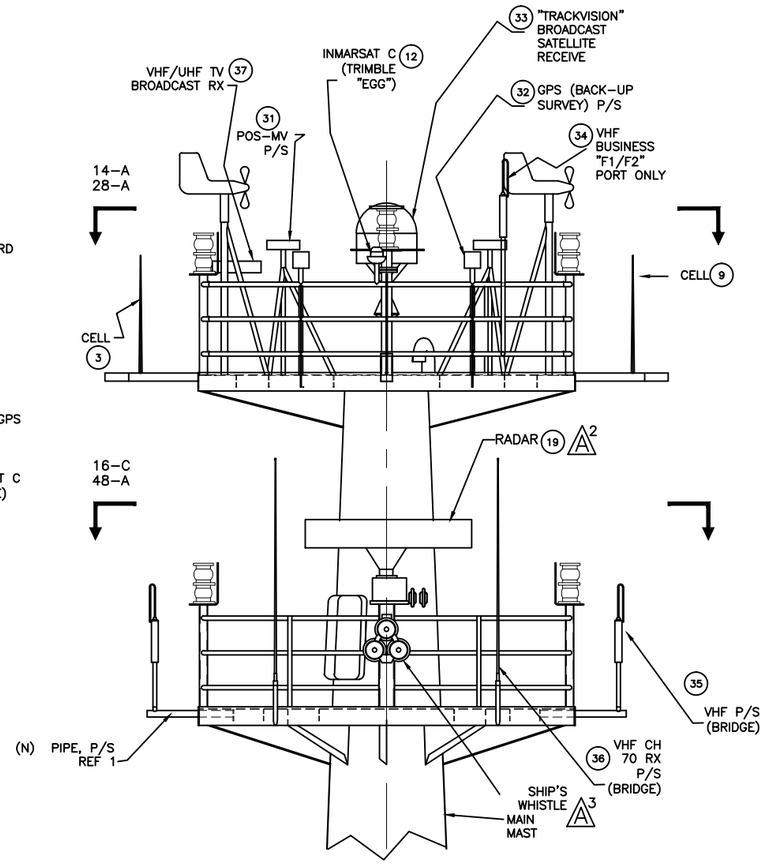


PLAN 16-C
TOP VIEW LOWER PLTFM
1/2" = 1'-0"

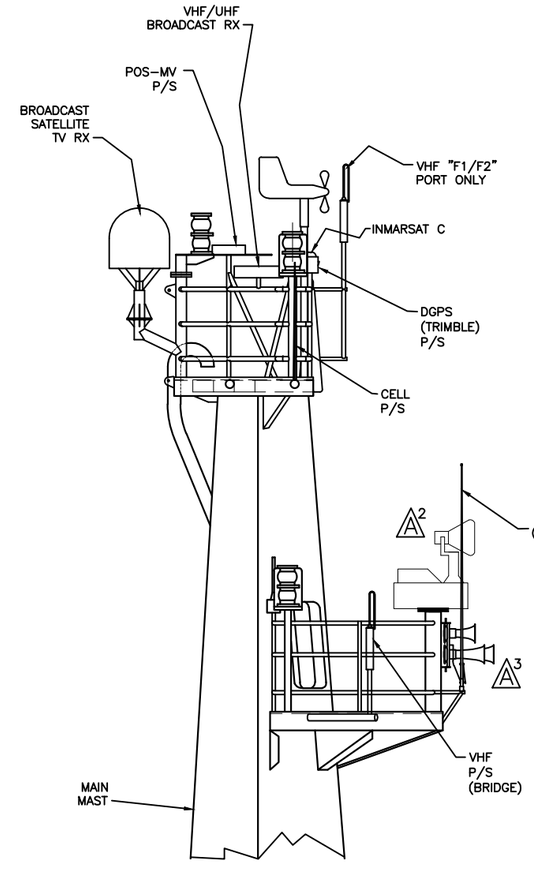



APPROX TURN CIRCLE OF WINDBIRD P/S (REF 1)
FND'N WINDBIRD
POS-MV P/S
TRIMBLE GPS P/S
BROADCAST SATELLITE RX, "TRACKVISION 6"
INMARSAT C (TRIMBLE)
(N) PIPE, P/S REF 1
VHF/UHF BROADCAST TV
(E) YARD RELOCATED REF 1

PLAN 14-A
TOP VIEW UPPER PLTFM
1/2" = 1'-0"
SEE 28-A FOR LOCATION DETAILS

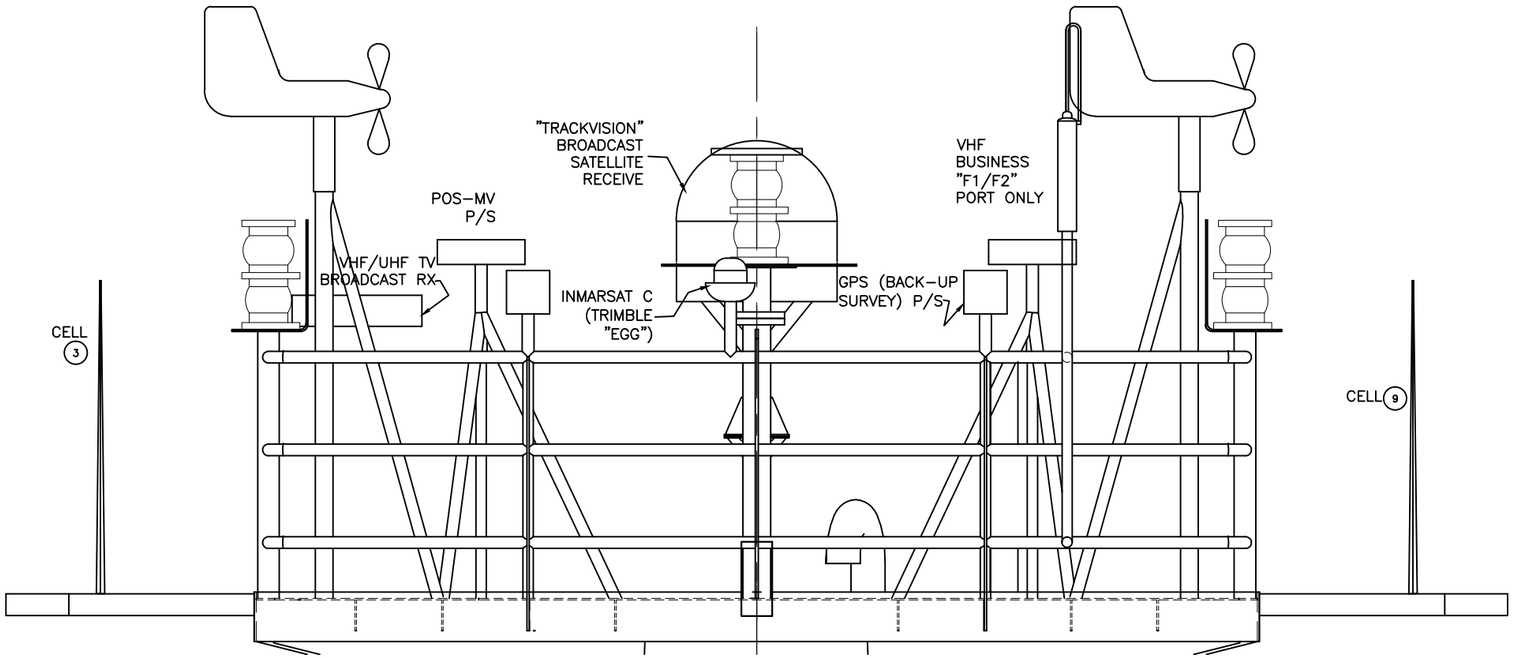


SECTION 12-A
FWD ARRANGEMENT, LKG AFT
3/8" = 1'-0"
SEE 19-A FOR LOCATION DETAILS



ELEVATION 10-A
OUTBD PROFILE STBD, LKG PORT
3/8" = 1'-0"

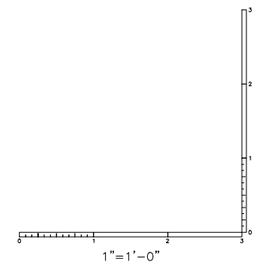
PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
	D	0YLJ5	TJ-171-003	A
	SCALE: AS SHOWN	CAD FILENAME TJ-171-003		SHT 2 OF 12



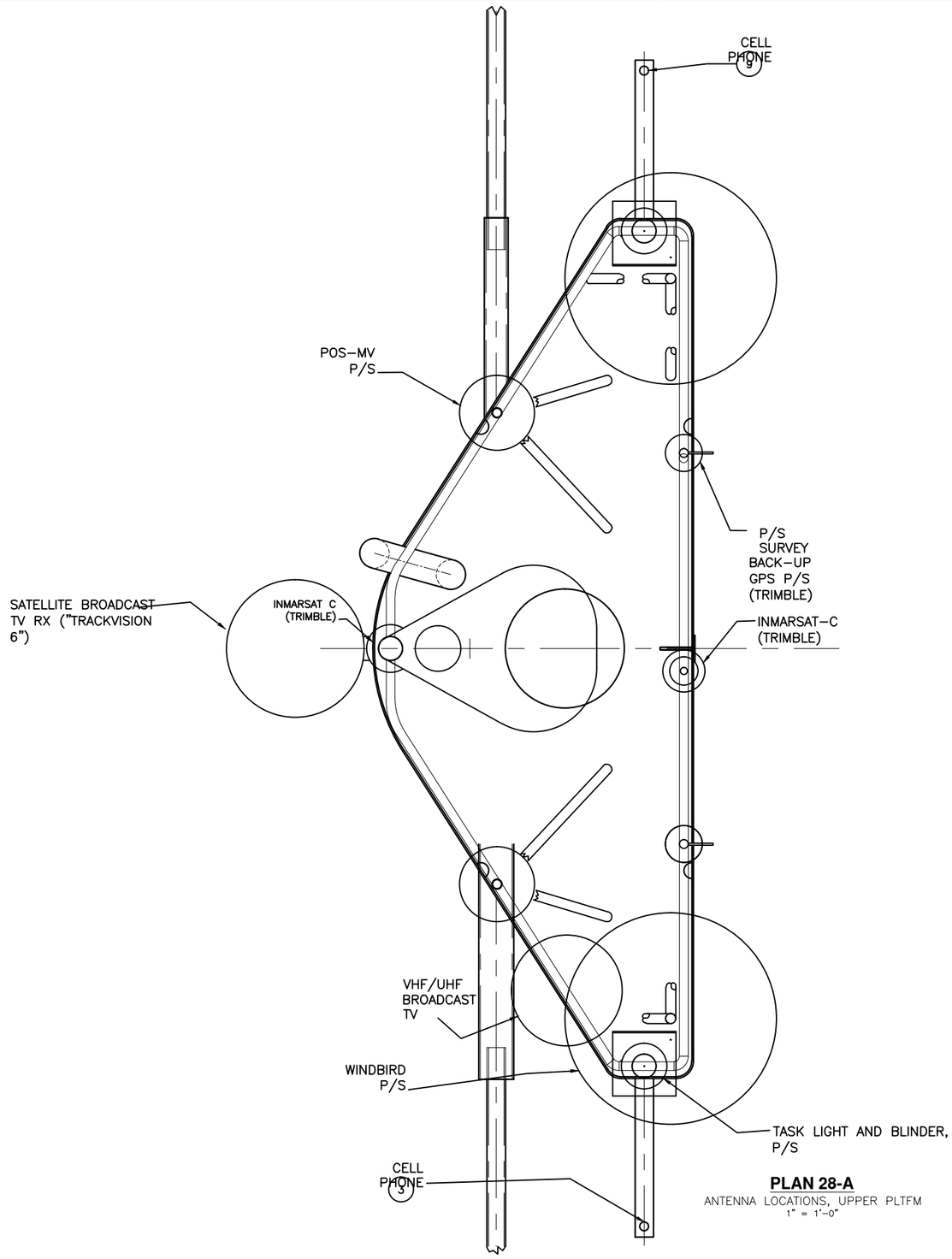
SECTION 19-A

UPPER PLATFORM ANTENNA LOCATIONS LKG AFT

1" = 1'-0"



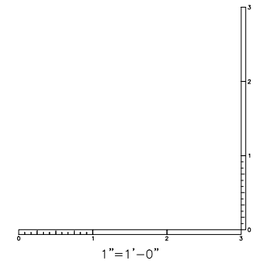
PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
	D	0YLJ5	TJ-171-003	
	SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 3 OF 12	



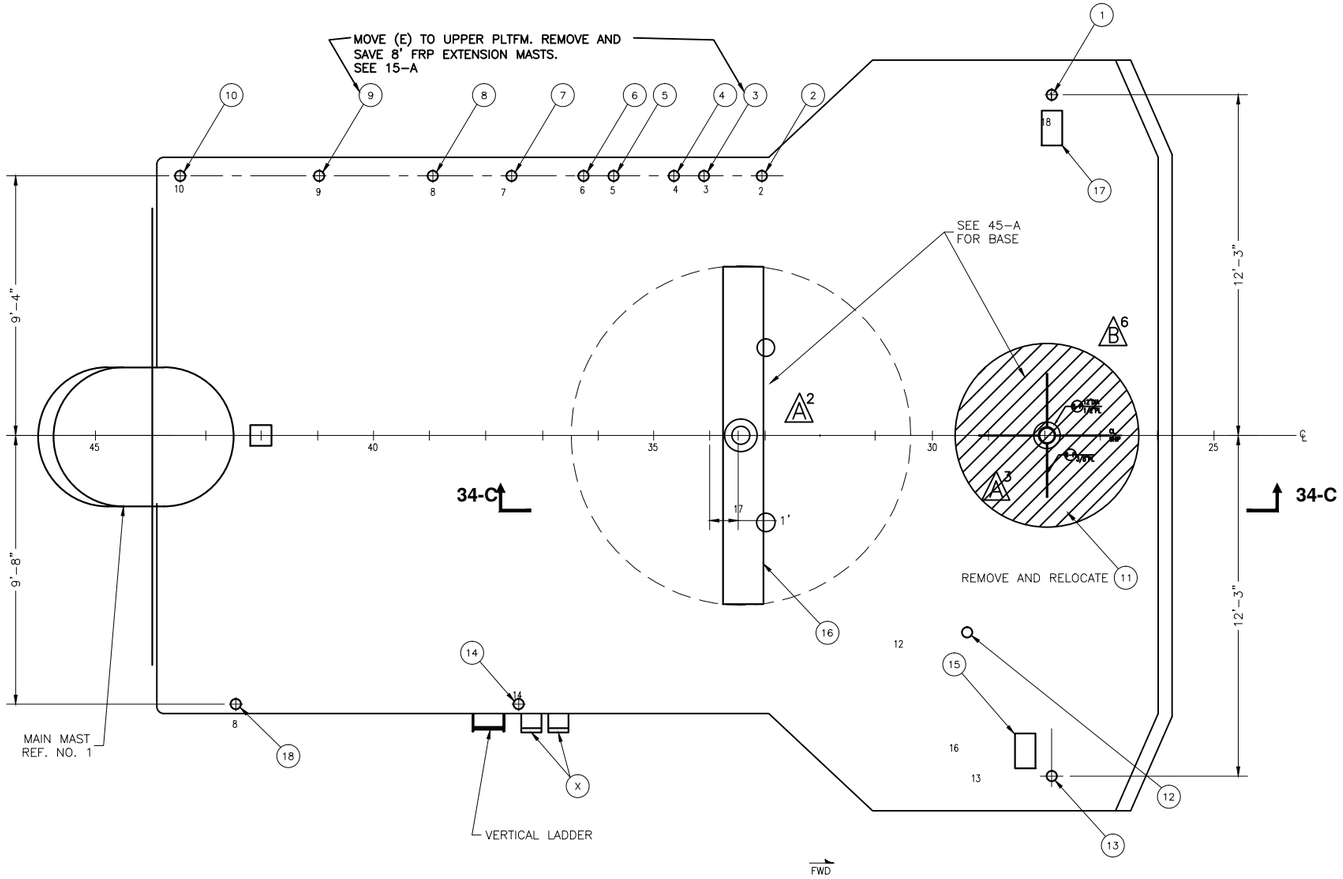
PLAN 28-A

ANTENNA LOCATIONS, UPPER PLTFM

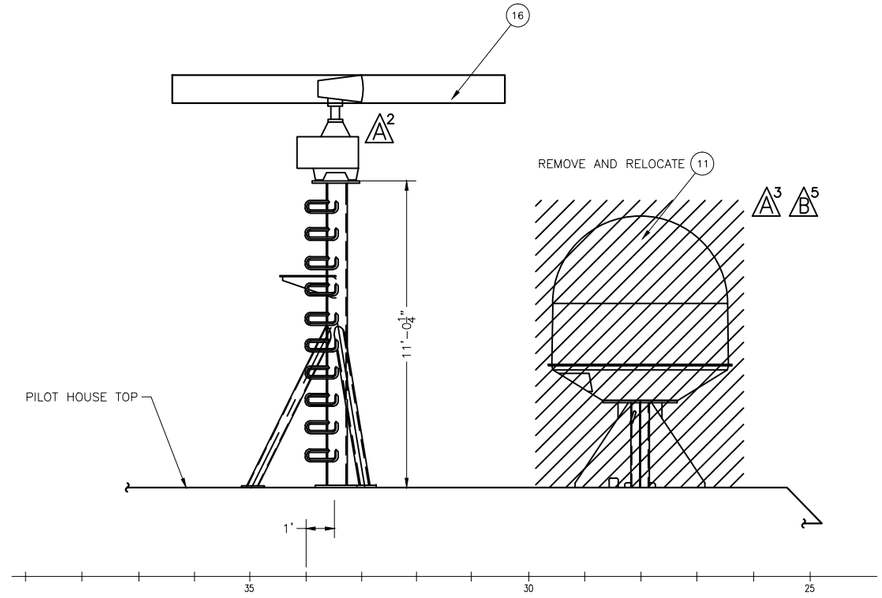
1" = 1'–0"



PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767–9061	SIZE D	CAGE CODE 0YLJ5	NOAA DRAWING NUMBER TJ–171–003	REV A
	SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 4 OF 12	



PLAN VIEW 38-C
TOP OF PILOT HOUSE
SCALE: 3 IN = 1 FT

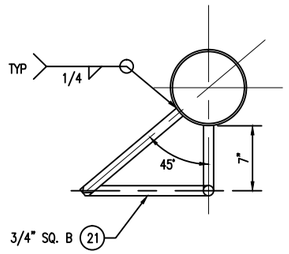


SECTION 34-C
TOP OF PILOT HOUSE
SCALE: 3 IN = 1 FT

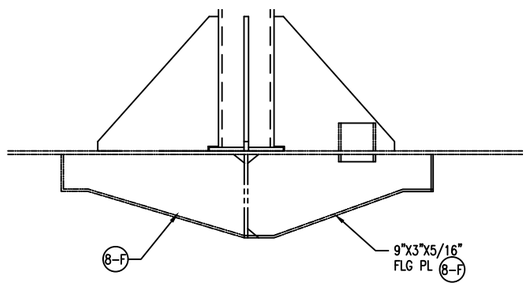
3"=1'-0"

PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

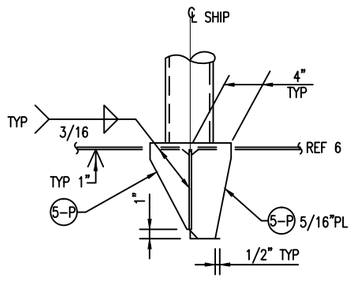
SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 5 OF 12	



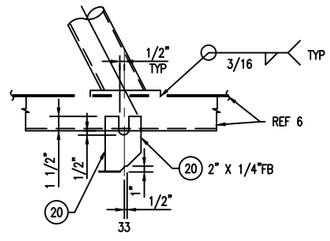
PLAN VIEW 48F (53D)
TYPICAL LADDER RUNG (10 REQ'D)
SCALE: NTS



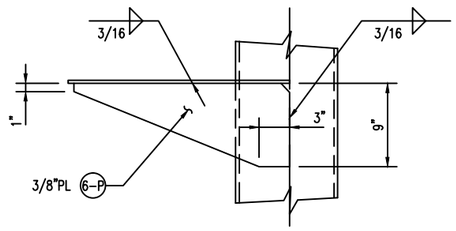
B10 A **SECTION VIEW 48D** (55D)
AT 12" FWD FRAME 34 LKG FWD
SCALE: NTS



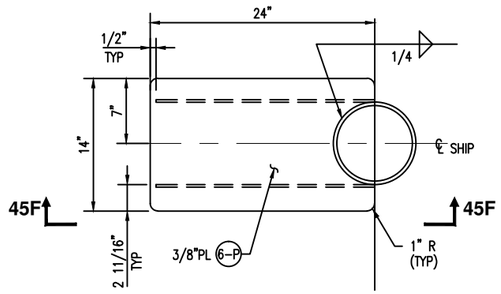
SECTION VIEW 48B (55D)
AT FRAME 35 LKG FWD
SCALE: NTS



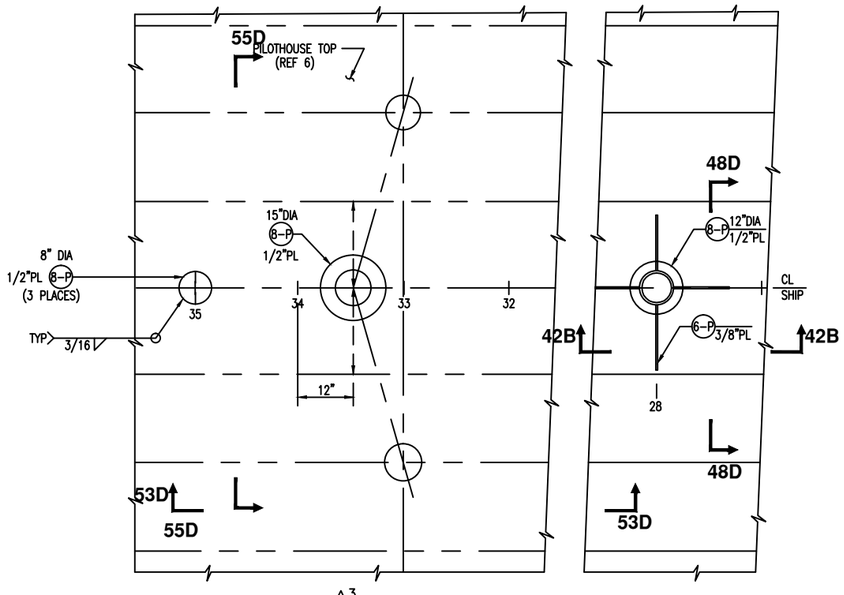
ELEVATION VIEW 48A (55D)
STBD SIDE SHOWN LKG TO PORT (PORT SIM & OPP)
SCALE: NTS



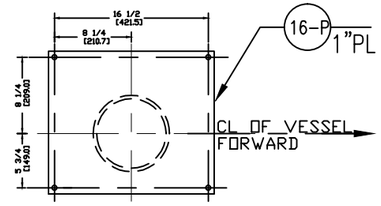
ELEVATION VIEW 45F
PLATFORM BRACKET (2 REQ'D)
SCALE: NTS



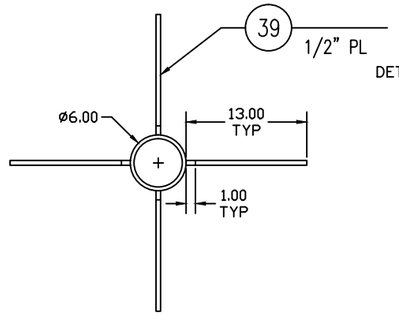
PLAN VIEW 45D (53D)
PLATFORM
SCALE: NTS



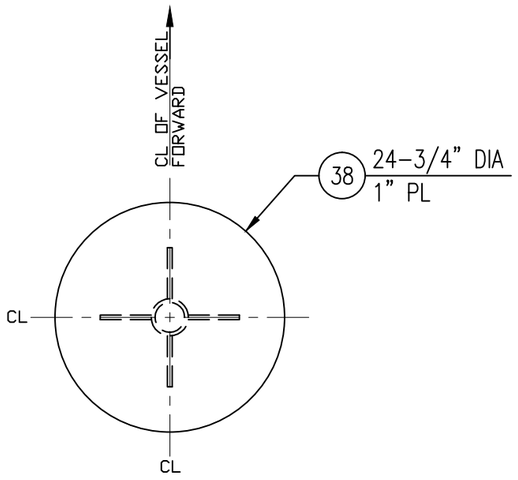
A3 **PLAN VIEW 45A**
BASE PLATES AND UNDERDECK STRUCTURE
SCALE: NTS



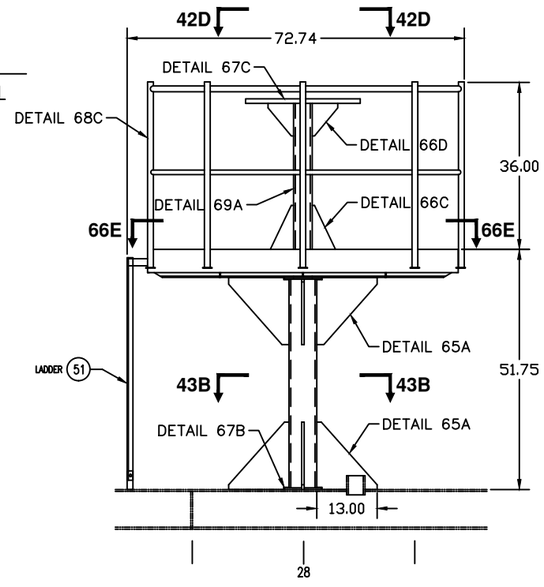
A2 **PLAN VIEW 43D**
X-BAND MOUNTING PLATE
SCALE: NTS



B8 **PLAN VIEW 43B**
MOUNTING GUSSETS
SCALE: NTS

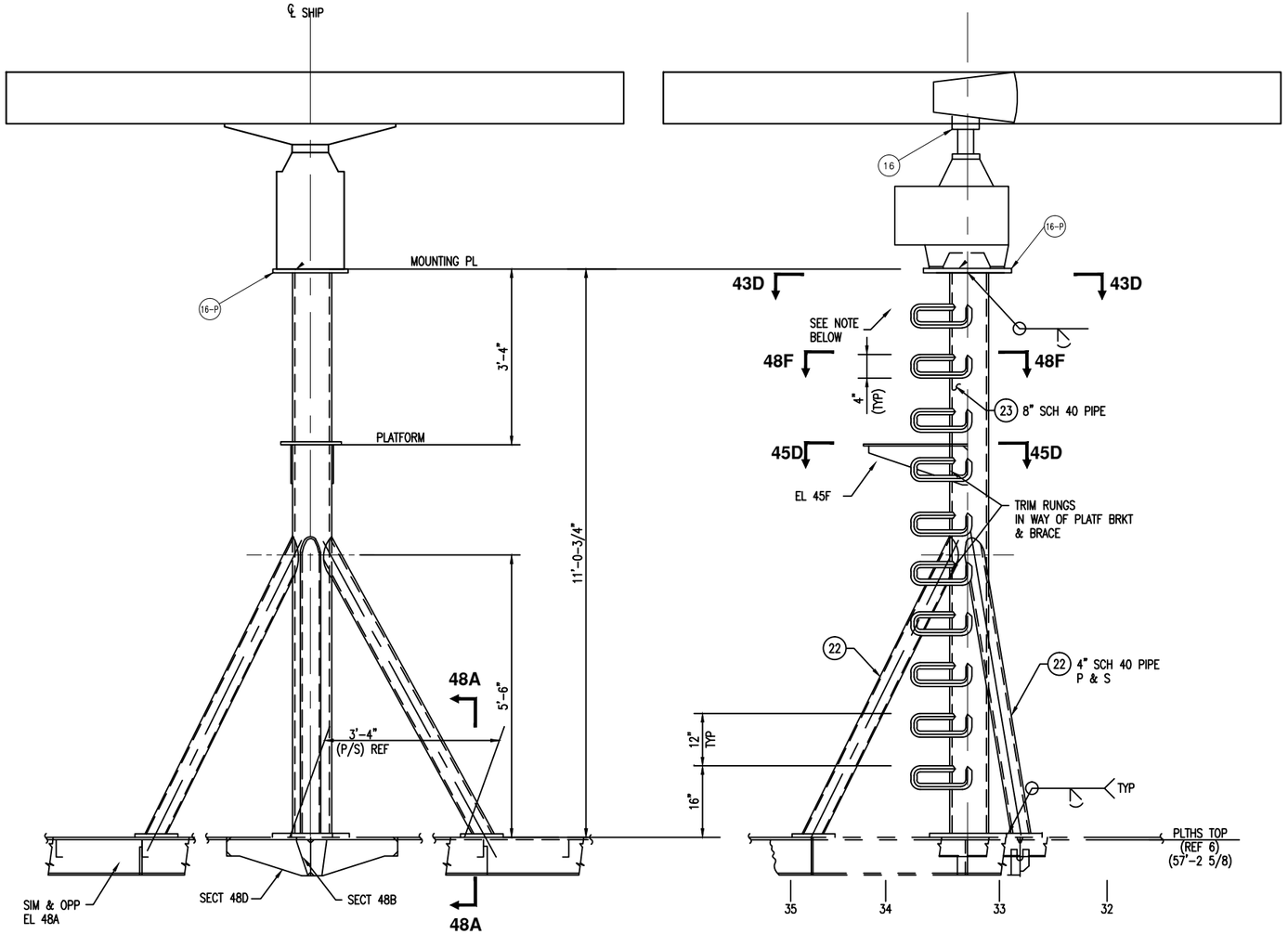


B9 A3 **PLAN VIEW 42D**
MOUNTING PLATE
SCALE: NTS



B7 A3 **SECTION VIEW 42B**
STBD LKG PORT
SCALE: NTS

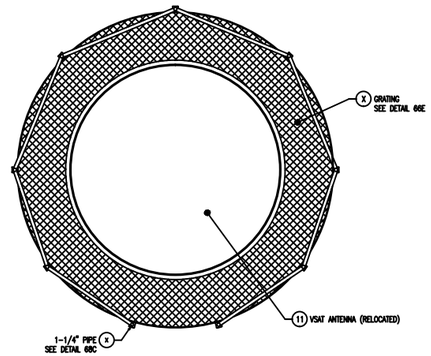
PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE D	CAGE CODE 0YLJ5	NOAA DRAWING NUMBER TJ-171-003 REV B
	SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 6 OF 12



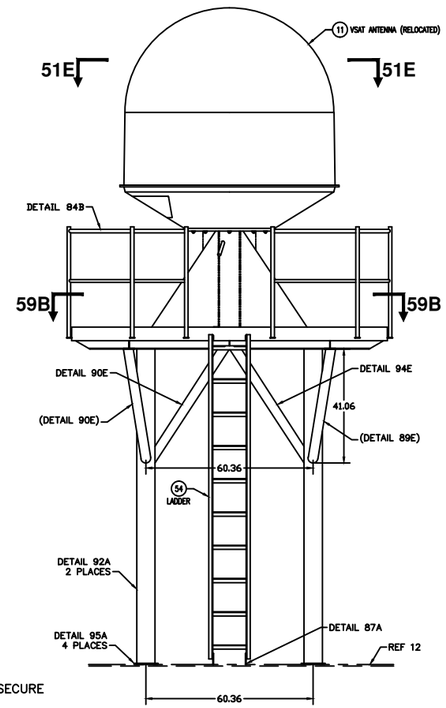
A2 **SECTION VIEW 55D**
LKG FWD (LADDER RUNGS NOT SHOWN)
SCALE: NTS

A2 **PLAN VIEW 53D**
STBD LKG TO PORT
SCALE: NTS

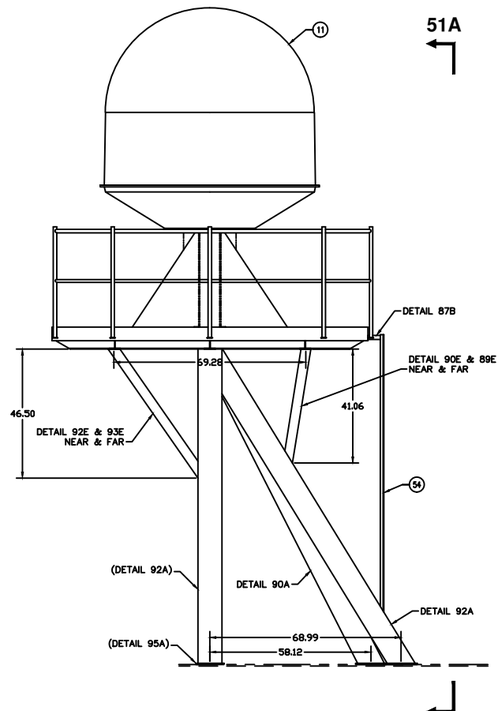
NOTE: TOP LADDER RUNG TO BE USED TO SECURE SAFETY HARNESS DURING OPERATIONS



PLAN VIEW 51E
STBD LKG TO PORT
SCALE: NTS

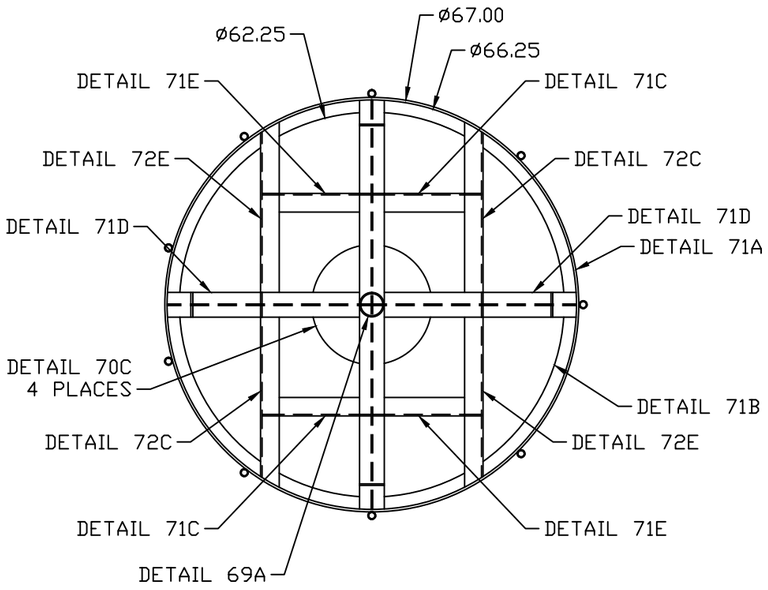


B12 **ELEVATION 51-A**
15' OFF CL
PORT LKG OUTBD
SCALE: NTS

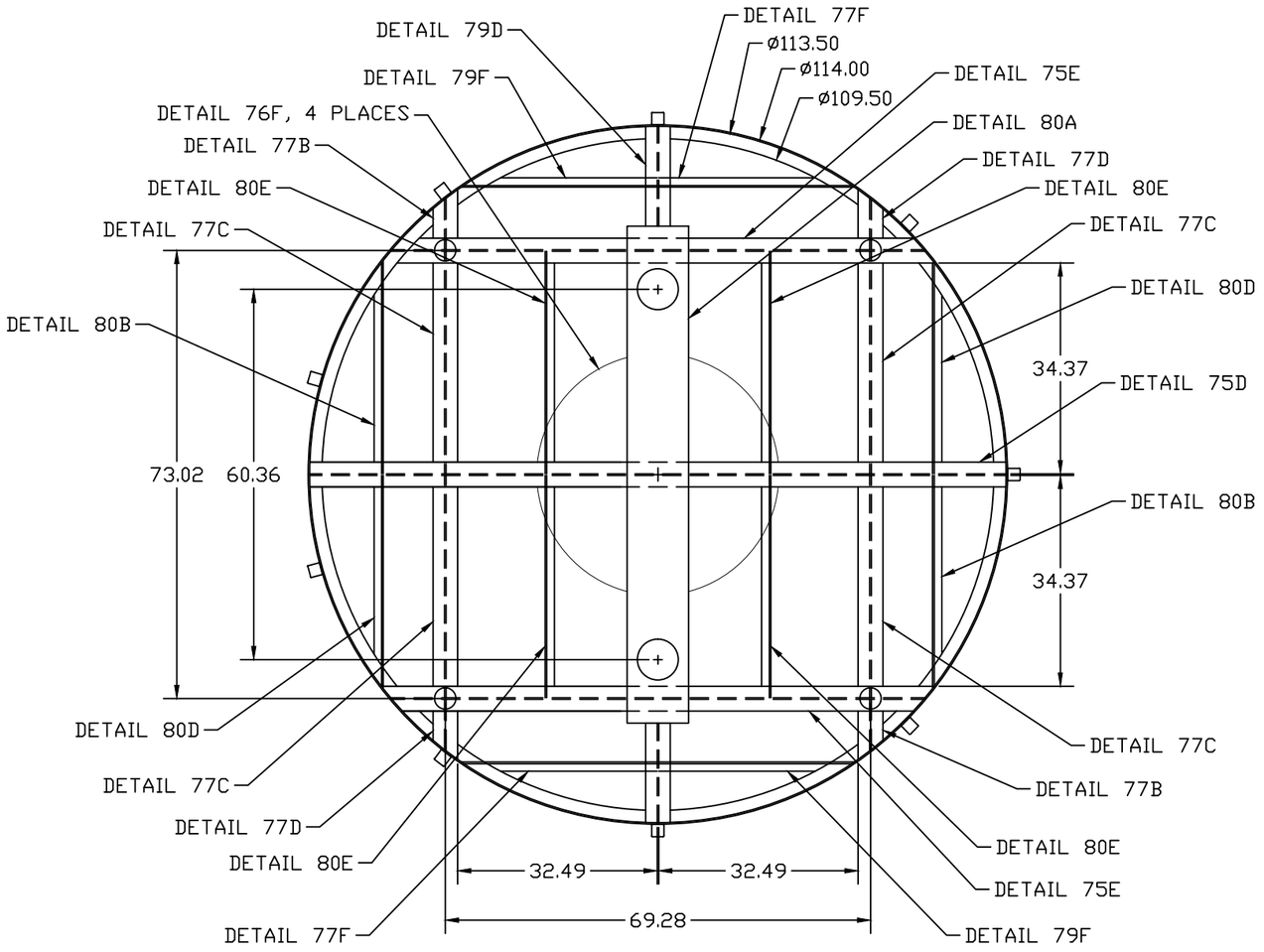


B11 **SECTION 49-A**
FR 95 LKG FWD
SCALE: NTS

PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
	D	0YLJ5	TJ-171-003	B
	SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 7 OF 12	



DETAIL 62C
FLEET 77 PEDESTAL FOUNDATION
SCALE: 1"=1'

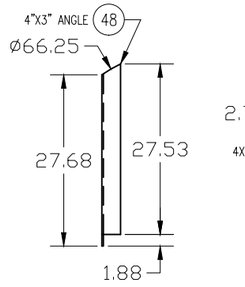


DETAIL 59B
VSAT ANTENNA FOUNDATION
SCALE: 1"=1'

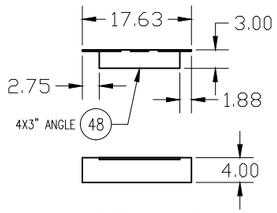
FLEET 77 & VSAT ANTENNA FOUNDATION DETAILS B 13

PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

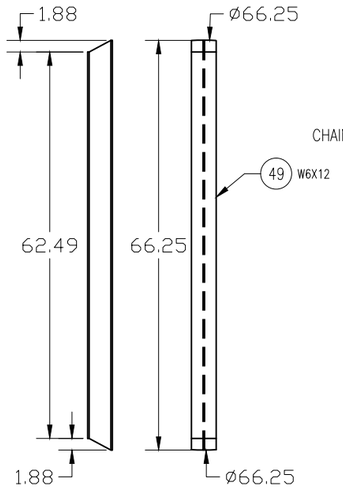
SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 8 OF 12	



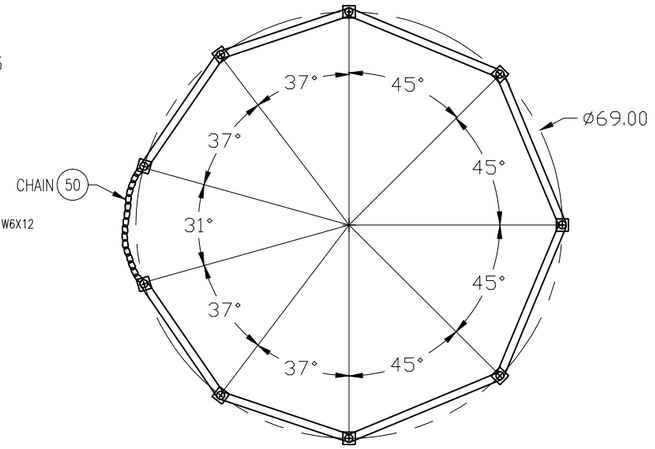
DETAIL 72E
2 REQD
SCALE: 1"=1'

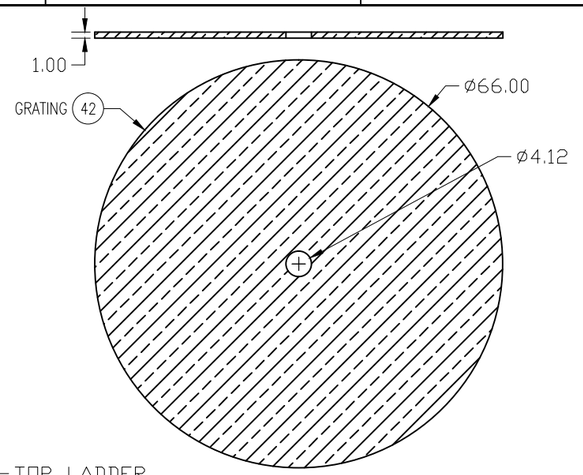


DETAIL 71E
2 REQD
SCALE: 1"=1'

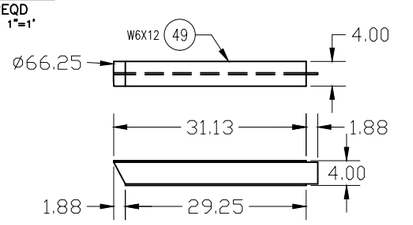


DETAIL 70D
SCALE: 1"=1'

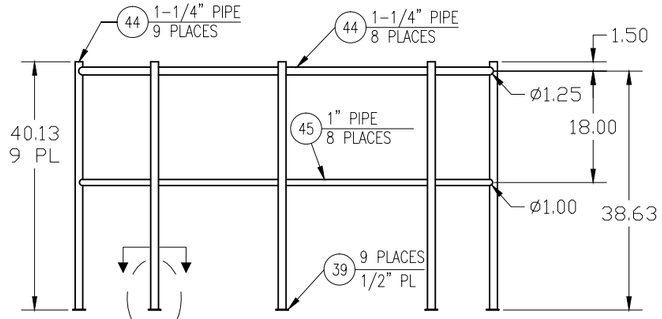




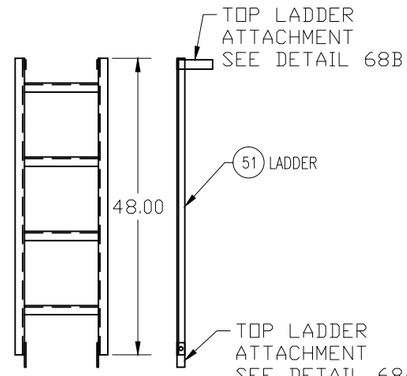
DETAIL 66E
SCALE: 1"=1'



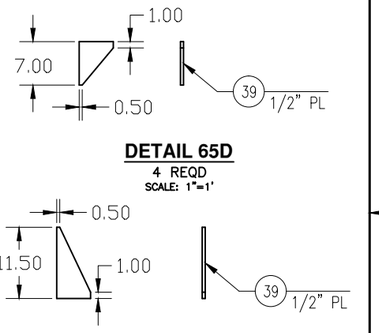
DETAIL 71D
2 REQD
SCALE: 1"=1'



DETAIL 68C
RAILING ASSY
SCALE: 1"=1'

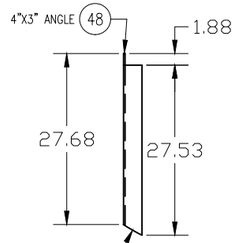


DETAIL 67C
SCALE: 1"=1'

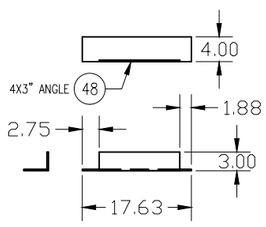


DETAIL 65D
4 REQD
SCALE: 1"=1'

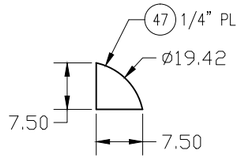
DETAIL 65C
4 REQD
SCALE: 1"=1'



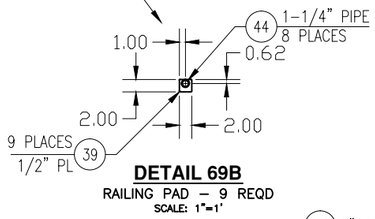
DETAIL 72C
2 REQD
SCALE: 1"=1'



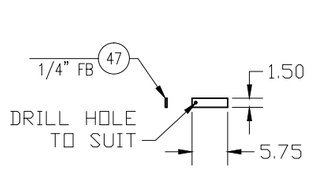
DETAIL 71C
2 REQD
SCALE: 1"=1'



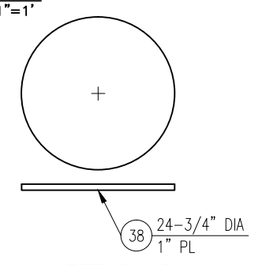
DETAIL 70C
4 REQD
SCALE: 1"=1'



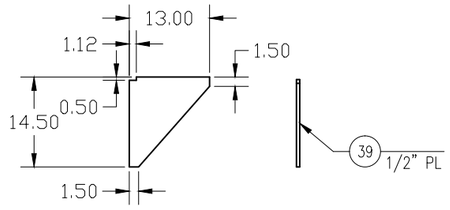
DETAIL 69B
RAILING PAD – 9 REQD
SCALE: 1"=1'



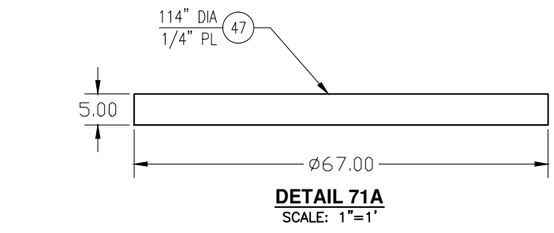
DETAIL 68B
TOP LADDER ATTACHMENT
SCALE: 1"=1'



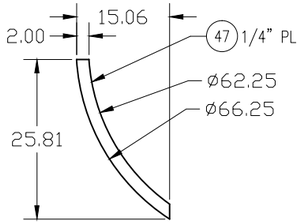
DETAIL 67B
2 REQD
SCALE: 1"=1'



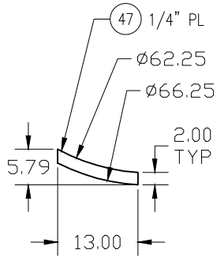
DETAIL 65B
4 REQD
SCALE: 1"=1'



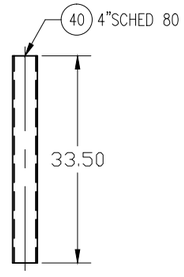
DETAIL 71A
SCALE: 1"=1'

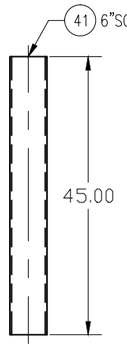


DETAIL 71B
4 REQD
SCALE: 1"=1'



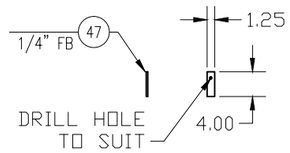
DETAIL 70B
4 REQD
SCALE: 1"=1'



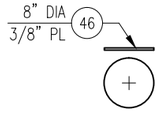


DETAIL 69A
SCALE: 1"=1'

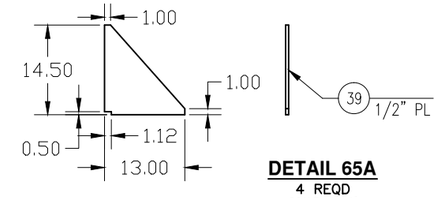
DETAIL 68A
SCALE: 1"=1'



DETAIL 68A
BOTTOM LADDER ATTACHMENT
SCALE: 1"=1'



DETAIL 66A
2 REQD
SCALE: 1"=1'



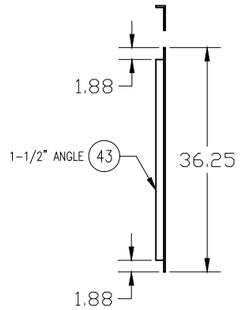
DETAIL 65A
4 REQD
SCALE: 1"=1'

FLEET 77 ANTENNA FOUNDATION DETAILS

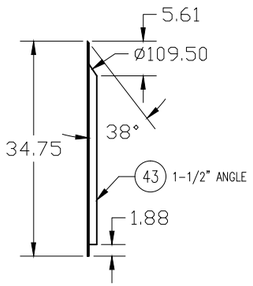
B 14

PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

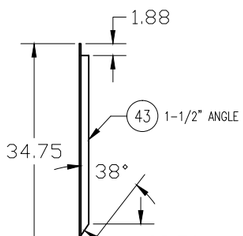
SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 9 OF 12	



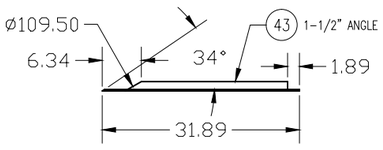
DETAIL 80E
4 REQD
SCALE: 1"=1'



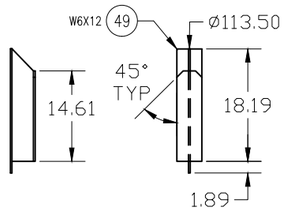
DETAIL 80D
2 REQD
SCALE: 1"=1'



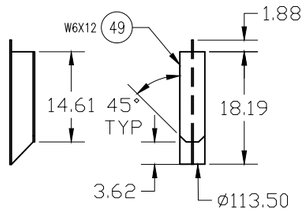
DETAIL 80B
2 REQD
SCALE: 1"=1'



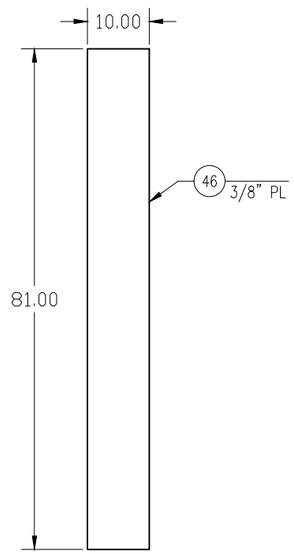
DETAIL 79F
2 REQD
SCALE: 1"=1'



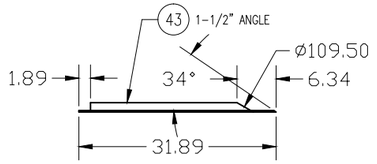
DETAIL 79D
2 REQD
SCALE: 1"=1'



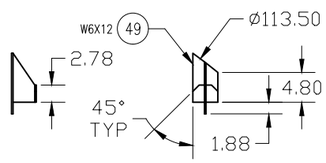
DETAIL 79C
2 REQD
SCALE: 1"=1'



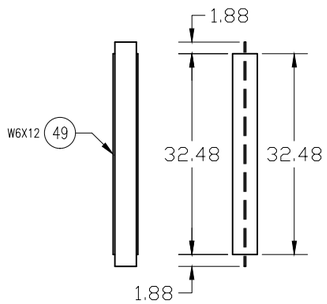
DETAIL 79A
SCALE: 1"=1'



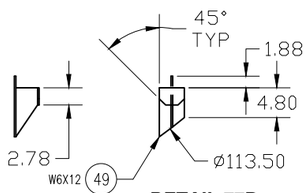
DETAIL 77F
2 REQD
SCALE: 1"=1'



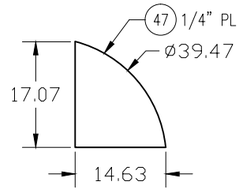
DETAIL 77D
2 REQD
SCALE: 1"=1'



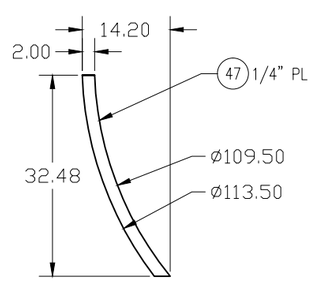
DETAIL 77C
4 REQD
SCALE: 1"=1'



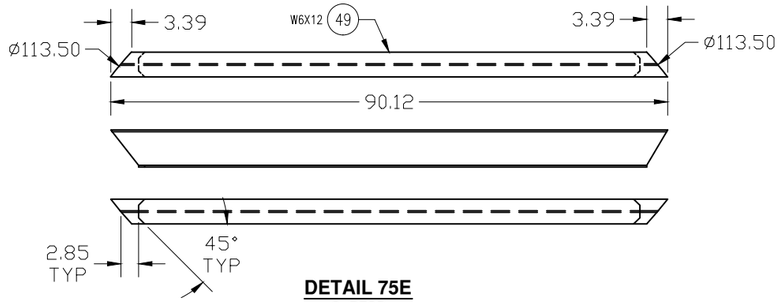
DETAIL 77B
2 REQD
SCALE: 1"=1'



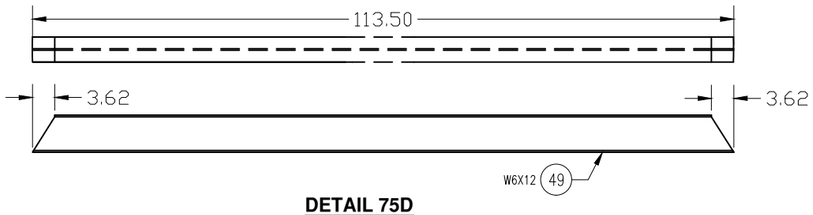
DETAIL 76F
4 REQD
SCALE: 1"=1'



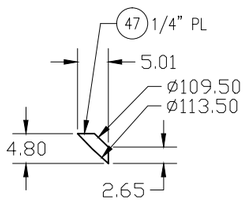
DETAIL 76C
4 REQD
SCALE: 1"=1'



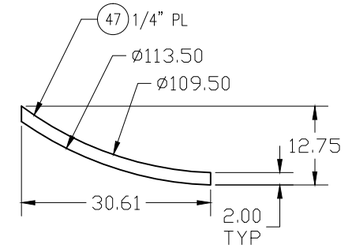
DETAIL 75E
2 REQD
SCALE: 1"=1'



DETAIL 75D
SCALE: 1"=1'



DETAIL 74C
4 REQD
SCALE: 1"=1'

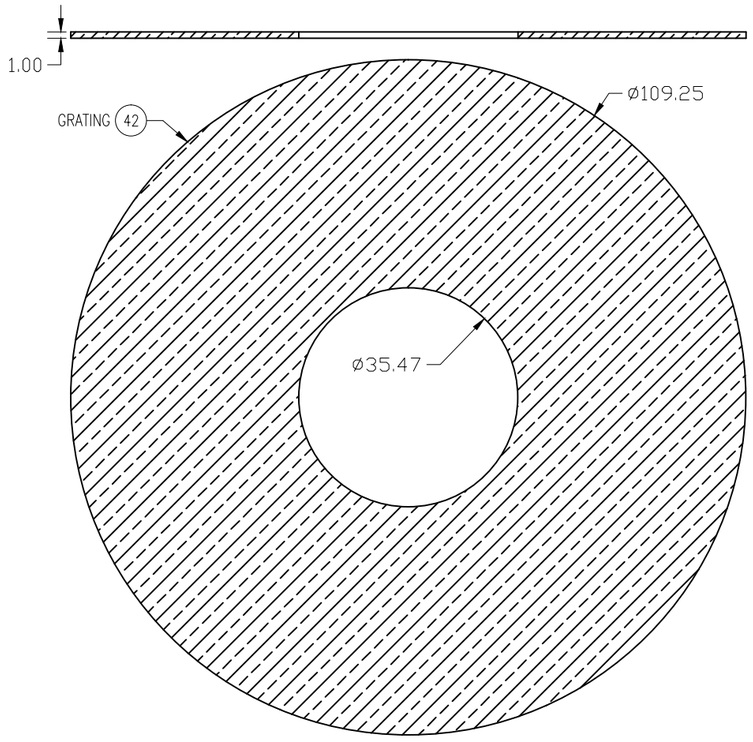


DETAIL 73C
4 REQD
SCALE: 1"=1'

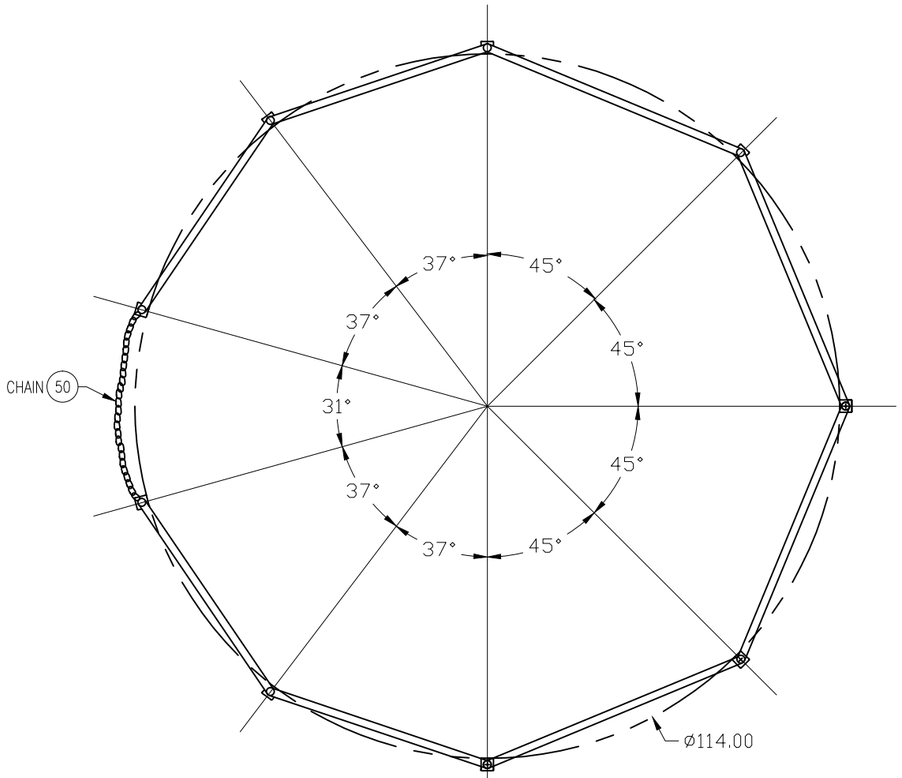
VSAT ANTENNA FOUNDATION DETAILS B15

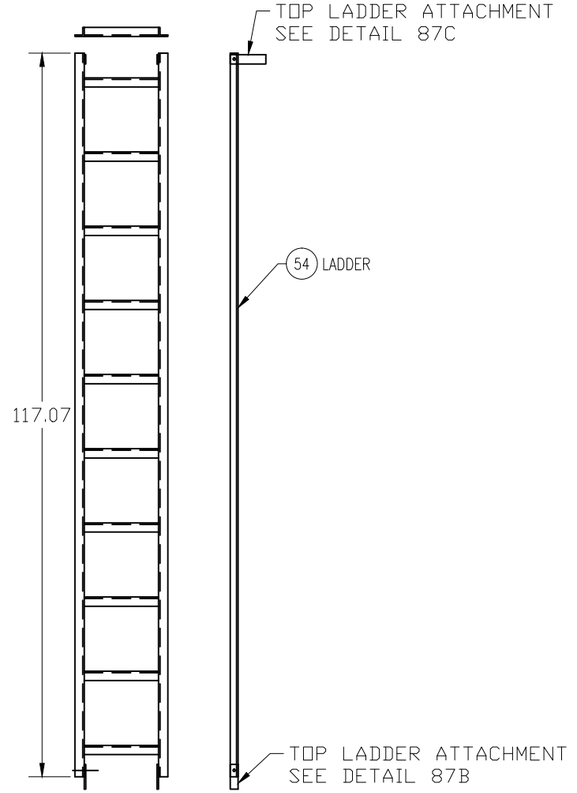
PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

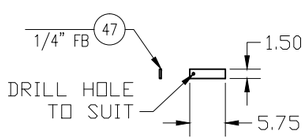
SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003	SHT 10 OF 12	



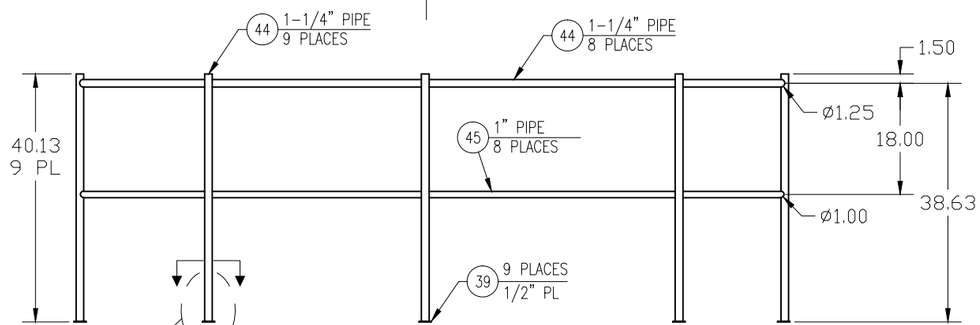
DETAIL 87C
SCALE: 1"=1'



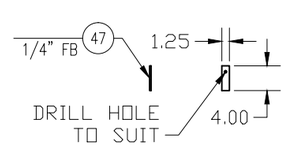




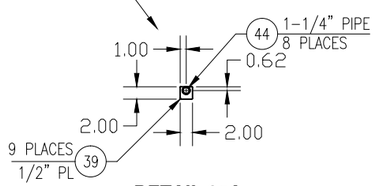
DETAIL 87B
TOP LADDER ATTACHMENT
SCALE: 1"=1'



DETAIL 84B
RAILING ASSY
SCALE: 1"=1'



DETAIL 87A
BOTTOM LADDER ATTACHMENT
SCALE: 1"=1'



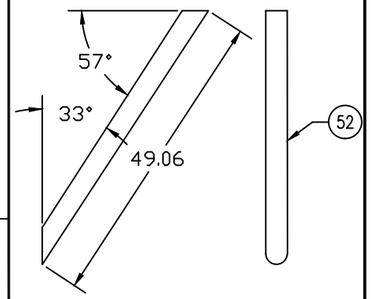
DETAIL 85A
RAILING PAD – 9 REQD
SCALE: 1"=1'

VSAT ANTENNA FOUNDATION DETAILS

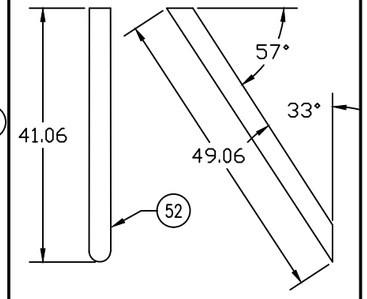
B 16

PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003		SHT 11 OF 12



DETAIL 96E
SCALE: 1"=1'



DETAIL 94E
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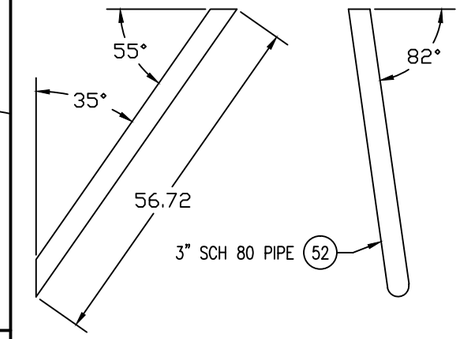

DETAIL 93E
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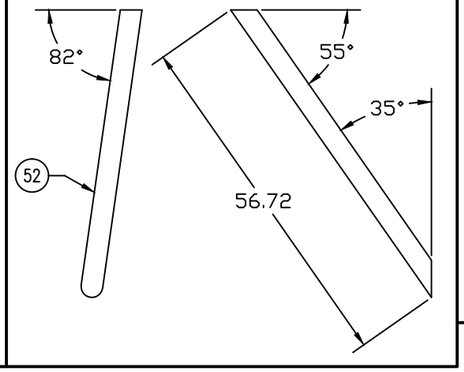
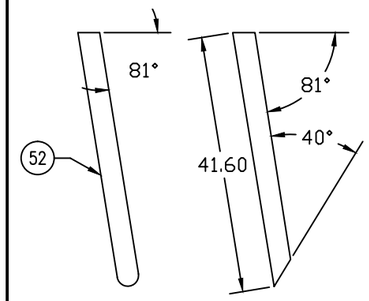
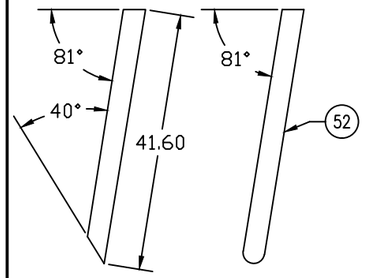


DETAIL 92E
SCALE: 1"=1'



DETAIL 90E
SCALE: 1"=1'

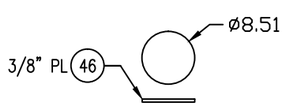


DETAIL 89E
SCALE: 1"=1'

DETAIL 94A
SCALE: 1"=1'

DETAIL 92A
SCALE: 1"=1'

DETAIL 90A
SCALE: 1"=1'



DETAIL 95A
4 REQD
SCALE: 1"=1'

VSAT ANTENNA FOUNDATION DETAILS A17 B

PREPARED BY:
Seaworthy Systems, Inc.
ESSEX, CT 06426
TEL: (860) 767-9061

SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	TJ-171-003	B
SCALE: AS SHOWN	CAD FILENAME TJ-171-003		SHT 12 OF 12